## PROCEEDINGS

OF THE

# BIOLOGICAL SOCIETY OF WASHINGTON 

## A NEW NAME FOR THE MEXICAN SNAKES OF THE GENUS DENDROPHIDION.

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The Mexican snakes belonging to the genus Dendrophidion have generally been associated with dendrophis, a name based upon two cotypes with entire anals (fide Bocourt) from Cayenne, French Guiana. One of these has 140 ventrals and 196 caudals (fide Schlegel). ${ }^{2}$ Three Mexican and eleven Central American specimens in the U. S. National Museum, the Museum of Comparative Zoology, the Philadelphia Academy of Sciences, and the University of Michigan Museum of Zoology, as well as three others reported by Bocourt from Guatemala, indicate that such a disposition is not correct. They agree with dendrophis in having entire anals, but they have higher ventral counts (149 to 174) and lower caudal counts (about 100 to 126 ). Moreover they are characterized by the absence posteriorly on the body of any clear evidence of a striped pattern (the tail, however, is distinctly striped), and the presence of 38 to 44 maxillary teeth (five specimens).

Aside from specimens referred to dendrophis, the only others now known from Central America are placed in clarki and paucicarinatus. Neither of these is the same as the form which occurs in Mexico. The former is green anteriorly (even in the young) and has a different hemipenial structure (much enlarged basal spines). D. paucicarinatus has only the median scales (five rows) keeled, the anal divided (in type), and the ventrals apparently more numerous (183 in type).

The only other name available for Central American specimens is percarinatus Cope (Proc. Amer. Philos. Soc., vol. 31, 1893, p. 344), based upon a specimen from Boruca, Costa Rica, with 155 ventrals, anal divided, 145 caudals, and the posterior fourth of the body striped. To this form

[^0]belong all Central American "dendrophis" with divided anals, as indicated by 16 specimens examined by me from various localities between Panamá and Honduras. These have 149 to 169 ventrals, 142 to 163 caudals, anal divided, and all are striped posteriorly. Seven have 35 to 39 maxillary teeth.

Accordingly, four forms appear to exist in Central America and Mexico, to none of which is applicable the name dendrophis. The one extending into Mexico may be known as

Dendrophidion vinitor, sp . nov.
Holotype.-U. S. National Museum No. 110662, a young female, Fiedras Negras, Guatemala. Paratypes.-Thirteen. In the U. S. National Museum, No. 46589, Teapa, Tabasco; No. 7099, "Mexico"; Nos. 14215, 14220, "Nicaragua." In the Museum of Comparative Zoology, Nos. 17117, 9561, Matagalpa, Nicaragua; No. 19342, Suretka, Costa Rica; No. 19344, La Loma Mts., Panamá; Nos. 42782-3, Pequeni-Esperanza Ridge, Panamá. In the Philadelphia Academy of Natural Sciences, Nos. 22863-4, eastern Nicaragua. In the University of Michigan Museum of Zoology, No. 79766, Río Mico, Recero, Nicaragua.
Diagnosis.-Differing from all other members of the genus in having the anal consistently entire; subcaudals about 100 to 126 ; pattern of cross-bands on all of body, those on posterior part not showing any clear evidence of formation of longitudinal stripes; maxillary teeth 38 to 44 ; basal spines of hemipenis not conspicuously enlarged. Scales strongly keeled, in 17-15 rows; dorsal scales with two apical pits.

Description of holotype.-Rostral much broader than high, portion visible from above a third length of internasals; frontal pentagonal, longer than its distance from tip of snout or length of median parietal suture; nasal large, completely divided; loreal large, a little longer than high; one large preocular, upper portion largest, not in contact with frontal; two postoculars, upper largest; temporals in two rows, lower anterior elongate, twice as long as upper anterior; nine supralabials, 3rd, 4th and 5th entering orbit; eye very large, its vertical diameter three times its distance from labial border, longitudinal diameter a little less than distance of eye from snout; nine infralabials, five in contact with anterior chinshields, two with posterior; anterior chinshields a little larger than, and subequal in length to posterior chinshields.

Dorsals strongly keeled (except outer row), with two apical pits, in $17-17-15$ rows; ventrals 160 ; anal entire; caudals more than 96 , extreme tip of tail missing. Total length 510 mm ., tail 169 mm .

Color in life described in field notes as follows. Dorsal surface of head brownish gray, the sutures darker and with a slightly reddish tinge; upper parts of four preocular labials with a reddish tinge; dorsal head color extending laterally in temporal region to (and including) upper edges of two postocular labials, including all of posterior labial; lower edge of this color dark brown, mixed with dull, brownish brick-red; lower parts of 7th and 8th labials, all of 5th and 6th, and lower parts of 3rd and 4th labials pure
white; 59 bands on body, 54 on tail; band on neck covering one scale length, brownish gray laterally, yellow dorsally; size of yellow dorsal area in light bands decreasing posteriorly, the color disappearing near posterior part of body; light bands margined anteriorly or posteriorly (or both) by narrow, irregular areas of black; light bands gradually disappearing posteriorly, becoming practically indistinguishable on posterior part of body; tail bands and those on posterior part of body black; black borders of light bands interspersed or themselves bordered by brick-red, this color especially prominent medially; central ground color between bands brownish gray anteriorly, becoming light brown tinged with red on middle and posterior part of body; dorsal color extending onto ends of ventrals; no stripes on body; tail with a lateral stripe of dark brown (black) interspersed with brick-red, involving edges of subcaudals and lower half of outer scale rows; medially it is bordered by a light line two half scale rows wide; these two light stripes enclose two series of transverse, short (less than one scale length) dark spots separated from each other by a series of vague light spots; gular region white; belly yellow; subcaudal surface yellow, lighter posteriorly.

Remarks.-In the largest specimen (No. 14220, total length 1453 mm ., body 948 mm ., tail incomplete) the cross-bands are still visible, though dim. The supralabials are 9-9, preoculars 1-1, postoculars 2-2, temporals $2-2$, scale rows $17-15$ in all.

The only other data on variation in vinitor are furnished by Bocourt (Miss. Sci. Mex., 1890, p. 730), who states that one Petén and two Vera Paz specimens have entire anals. Günther (Biol. Centr. Amer., 1894, p. 127) and Boulenger (Cat. Snakes Brit. Mus., vol. 2, 1894, p. 16) give data on other specimens from "Guatemala" and "Vera Paz," some of which may be vinitor, but the discrepancies between their counts are so great that it seems best not to rely upon any of them. Not only are errors in counts indicated, but each author apparently confused other species (perhaps Drymobius chloroticus among them) with "dendrophis."

Scale counts of vinitor.

| Museum | Number | Sex | Ventrals | Caudals | Infralabials | Teeth | Locality |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| USNM | 7099 | $0^{7}$ | 160 | 122 | 9-9 | - | Mex. |
| MCZ | 9561 | $0^{7}$ | 151 | 117 | 10-10 | 41 | Nic. |
| UMMZ | 79766 | $0^{7}$ | 168 | 118 | - | - | Nic. |
| MCZ | 19344 | $0^{7}$ | 161 | 126 | 10-10 | - | Pan. |
| MCZ | 42782 | $0^{7}$ | 149 | - | 10-10 | 38 | Pan. |
| USNM | 14215 | ¢ | - | - | 9-9 | - | Nic. |
| USNM | 14220 | \% | 174 | - | 11-11 | 42 | Nic. |
| USNM | 46589 | \% | - | 115 | 9-9 | - | Mex. |
| USNM | 110662 | \% | 160 | $100+$ ? | ? 9-9 | 44 | Guat. |
| ANSP | 22863 | \% | 160 | - | 9-9 | - | Nic. |
| ANSP | 22864 | \% | 157 | 118 | 9-9 | - | Nic. |
| MCZ | 17117 | \% | 163 | 121 | 10-10 | - | Nic. |
| MCZ | 19342 | \% | 161 | 126 | 10-10 | 40 | C.R. |
| MCZ | 42783 | \% | 155 | 114 | 10-10 | - | Pan. |

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The species perhaps most closely related to vinitor-at least that with which it has been confounded-is percarinatus, whose range is overlapped by that of the former. The sixteen specimens examined of this are as follows: Honduras: Lancetilla (MCZ 29677). Nicaragua: Comoapa (MCZ 9550; Río Mico, 10 miles above Recero (UMMZ 79764). ${ }^{3}$ Costa Rica: Tilaran, Guanacaste (USNM 70663). Panamá: Cana (USNM 50123); Playa Grande, Tres Hermanos Ridge (MCZ 42760); Torres (MCZ 19343). Canal Zone: Gatun (USNM 54080); Chiva Chiva (MCZ 24002); Barro Colorado (MCZ 18902, 34882); Gatun, Ft. Davis (MCZ 22255); Red Tank (MCZ 24000); Ft. Clayton (MCZ 25124); Juan Mina (MCZ 26646); Salamanca, Hydrographic Station (MCZ 39978); Ft. Randolph (MCZ 20552). These have the posterior part of the body distinctly striped, while the specimens with single anals (vinitor) do not. The two species may be compared as follows.

| Anal | vinitor <br> single | percarinatus <br> double |
| :--- | :--- | :--- |
| Caudals | 100 to 126 | 142 to 163 |
| Posterior Body Pattern | barred | striped |
| Teeth | 38 to 44 | 35 to 39 |
| Range | Mex. to Panamá | Honduras to Panamá |

## Scale counts of percarinatus

| Museum | Number | Sex | Ventrals | Caudals | Infralabials | Teeth | Locality |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MCZ | 29677 | $0^{7}$ | 153 | 163 | $11-11$ | - | Hond. |
| MCZ | 9550 | $\sigma^{7}$ | 154 | 155 | $11-11$ | 39 | Nic. |
| UMMZ | 79764 | $0^{7}$ | 156 | 152 | - | - | Nic. |
| USNM | 70663 | $0^{7}$ | 149 | 152 | $10-10$ | - | C.R. |
| USNM | 50123 | $0^{7}$ | 162 | $143+$ | $10-11$ | 38 | Pan. |
| MCZ | 42760 | $0^{7}$ | 169 | - | $11-11$ | - | Pan. |
| MCZ | 18902 | $0^{7}$ | 158 | 150 | $11-11$ | - | C.Z. |
| MCZ | 22255 | $0^{7}$ | 159 | 142 | $11-12$ | - | C.Z. |
| MCZ | 24000 | $0^{7}$ | 158 | $137+$ | $11-11$ | - | C.Z. |
| MCZ | 25124 | $0^{7}$ | 155 | $118+$ | $11-11$ | 36 | C.Z. |
| MCZ | 34882 | $0^{7}$ | 158 | $136+$ | $10-11$ | - | C.Z. |
| MCZ | 19343 | $\circ$ | 161 | 150 | $10-10$ | - | Pan. |
| MCZ | 20552 | $\circ$ | 163 | 146 | $10-10$ | 36 | C.Z. |
| MCZ | 24002 | $\circ$ | 156 | 147 | $11-11$ | - | C.Z. |
| MCZ | 26646 | $\circ$ | 158 | 143 | $11-11$ | 37 | C.Z. |
| MCZ | 39978 | $\circ$ | 161 | - | $11-11$ | 35 | C.Z. |
| USNM | 54080 | $\circ$ | 161 | 144 | $11-11$ | 35 | C.Z. |

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[^1]
[^0]:    1 Walter Rathbone Bacon Scholar, Smithsonian Institution.
    2 It should be noted that Traill, in his translation (1843) of Schlegel's work, says that the eaudal number "probably should be 106 " (p. 152).

[^1]:    3 Data for this and for No. 79766 (vinitor) are from Gaige, Hartweg and Stuart, Occ. Papers Univ. Mich. Mus. Zool., no. 357, 1937, p. 12. Dr. L. C. Stuart has verified that No. 79764 has a divided anal, No. 79766 an entire anal.

